



**MISSOURI  
HIGHWAYS and TRANSPORTATION  
COMMISSION**

**JEFFERSON CITY, MISSOURI**

**GENERAL PROVISIONS AND  
SUPPLEMENTAL SPECIFICATIONS TO 2004  
MISSOURI STANDARD SPECIFICATIONS FOR  
HIGHWAY CONSTRUCTION**

**Effective July 1, 2004**

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## GENERAL PROVISIONS

### SECTION 404 NATIONWIDE PERMIT GENERAL CONDITIONS

**General Conditions.** The following general conditions shall be followed in order for authorization by a Nationwide Permit (NWP) to be valid. Permit authorization from U.S. Army Corps of Engineers (USACE) may have additional conditions that will be binding to the project. The contractor shall refer to the permit authorization letter included in the contract.

**1.0 Navigation.** No activity shall cause more than a minimal adverse effect on navigation.

**2.0 Soil Erosion and Sediment Controls.** Appropriate erosion and sediment controls shall be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, shall be permanently stabilized at the earliest practical date. Work within waters of the USA shall be performed, when possible, during periods of low-flow or no-flow.

**3.0 Aquatic Life Movements.** No activity shall substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams shall be installed such that low flow conditions are maintained.

**4.0 Equipment.** Heavy equipment working in wetlands shall be placed on mats, or other measures shall be taken to minimize soil disturbance.

**5.0 Regional and Case-by-Case Conditions.** The contractor's activity shall comply with any regional conditions that may have been added to the contract by the USACE Division Engineer, (see 33 CFR 330.4(e)), and with any case-specific conditions added by the USACE or by the state in the Section 401 water quality certifications.

**6.0 Wild and Scenic Rivers.** No activity shall occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status.

**7.0 Tribal Rights.** No activity shall impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

### **8.0 Endangered Species.**

**8.1** No activity will be authorized under any NWP that is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or that is likely to destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the USACE District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, and shall not begin work on the activity until notified by the USACE District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized.

**8.2** Authorization of an activity by a NWP shall not authorize the "take" of a threatened or endangered species as defined under the Federal Endangered Species Act. In the absence of separate authorization from the U.S. Fish and Wildlife Service, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act.

**9.0 Historic Properties.** No contractor activity, that may affect historic properties listed, or eligible for listing, in the National Register of Historic Places, will be authorized until the Commission has complied with the provisions of 33 CFR Part 325, Appendix C.

**10.0 Section 404 Conditions.** In addition to the General Conditions, the following conditions will apply only to activities that involve the discharge of dredged or fill material into waters of the USA, and shall be followed to maintain authorization by the NWPs.

**10.1 Water Supply Intakes.** No activity, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, shall occur in the proximity of a public water supply intake, except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

**10.2 Suitable Material.** No activity, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, shall consist of unsuitable material such as trash, debris, car bodies, asphalt, etc. Material used for construction or discharged shall be free from toxic pollutants in toxic amounts in accordance with Section 307 of the Clean Water Act.

**10.3 Mitigation.** The project shall be constructed to avoid and minimize adverse affects to waters of the U.S. to the maximum extent practical at the project site.

**10.4 Spawning Areas.** Activities, including structures and work in navigable waters of the USA or discharges of dredged or fill material in spawning areas during spawning seasons shall be avoided to the maximum extent practical. Activities that result in the physical destruction of an important spawning area, such as excavation, fill or smother downstream by substantial turbidity, will not be permitted.

**10.5 Management of Water Flows.** Discharges shall not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water, unless the primary purpose of the fill is to impound waters. The structure or discharge of dredged or fill material shall withstand expected high flows.

**10.6 Adverse Effects from Impoundments.** If the activity creates an impoundment of water, adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of the water's flow shall be minimized.

**10.7 Waterfowl Breeding Areas.** Activities into breeding areas for migratory waterfowl shall be avoided.

**10.8 Removal of Temporary Fills.** Any temporary fills shall be completely removed entirety, and the affected areas shall be returned to the pre-existing elevation.

### **10.9 Section 404 Nationwide Permit No. 3.**

**10.9.1** The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for the fill in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in material, construction techniques, or current construction codes or safety standards necessary to make repair, rehabilitation, or replacement will be permitted, provided the environmental effects resulting from such repair, rehabilitation, or replacement are minimal. Currently serviceable shall mean useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. The NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced or under contract to commence within two years of the date of the destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the COE District Engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

**10.9.2** Discharges of dredged or fill material, including excavation, into all waters of the US to remove accumulated sediment and debris in the vicinity of, and within, existing structures, such as bridges, culverted road crossings, water intake structures, etc., and the placement of new or additional rip rap to protect the structure, provided the permittee notifies the COE District Engineer in accordance with General Condition 13. The removal of sediment shall be limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet (60 m) in any direction from the structure. The placement of riprap shall be the minimum necessary to protect the structure or to ensure the safety of the structure. All excavated material shall be deposited and retained in an upland area unless otherwise specifically approved by the COE District Engineer under separate authorization. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the COE District Engineer.

**10.9.3** Discharges of dredged or fill material, including excavation, into all waters of the U.S. for activities associated with the restoration of upland areas damaged by a storm, flood, or other discrete event, including the construction, placement, or installation of upland protection structures and minor dredging to remove minor obstructions in a water of the U.S. The NWP applies to activities in waters of the U.S. associated with the replacement of the uplands. The restoration of the damaged areas shall not exceed the contours, or ordinary high water mark, that existing before the damage. Minor dredging to remove obstructions from the adjacent waterbody shall be limited to 50 cubic yards (38 m<sup>3</sup>) below the plane of the ordinary high water mark, and shall be limited to the amount necessary to restore the pre-existing bottom contours of the waterbody. The dredging shall not be done primarily to obtain fill for any restoration activities. This permit cannot be used in conjunction with NWP 18 or NWP 19 to restore damaged upland areas. This permit does not authorize new stream channelization or stream relocation projects. Any work authorized by this permit shall not cause more than minimal degradation of water quality, more than minimal changes to the flow characteristics of the stream, or increase flooding.

**10.10 Section 404 Nationwide Permit No. 12.** Activities required for the construction, maintenance and repair of utility lines and associated facilities in waters of the U.S. shall be as follows.

**10.10.1 Utility lines.** The construction, maintenance, or repair of utility lines, including outfall and intake structures and the associated excavation, backfill, or bedding for the utility lines, in all waters of the U.S., provided there is no change in preconstruction contours. A “utility line” will be defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the U.S., provided that the material is not placed in such a manner that the material is dispersed by currents or other forces. The COE District Engineer may extend the period of temporary side casting, not to exceed a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches (150 to 300 mm) of the trench shall be backfilled with topsoil from the trench. Furthermore, the trench shall not be constructed in such a manner as to drain waters of the U.S., such as backfilling with extensive gravel layers, creating a french drain effect. For example, utility line trenches may be backfilled with clay blocks to ensure that the trench does not drain the waters of the U.S. through which the utility line is installed. Any exposed slopes and stream banks shall be stabilized immediately upon completion of the utility line crossing of each waterbody.

**10.10.2 Foundations for Overhead Utility Line Towers, Poles, and Anchors.** The construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the U.S., provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) shall be used where feasible.

**10.10.3 Access Roads.** The construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the US, provided the discharges do not cause the loss of greater than 1/2 acre (0.20 ha) of non-tidal waters of the U.S. Access roads shall be the minimum width necessary. Access roads shall be constructed so that the length of the road minimizes the adverse effects on waters of the US and as near as possible to preconstruction contours and elevations. Access roads constructed above preconstruction contours and elevations in waters of the U.S. shall be properly bridged or culverted to maintain surface flows. The term “utility line” does not include activities which drain a water of the U.S., such as drainage tile, or french drains; however, it does apply to pipes conveying drainage from another area. For the purposes of this NWP, the loss of waters of the U.S. includes the filled area plus waters of the U.S. that are adversely affected by flooding, excavation, or drainage as a result of the project. Activities authorized by paragraph 1.1 through 1.3 may not exceed a total of 1/2 acre (0.20 ha) loss of waters of the U.S. Waters of the U.S. temporarily affected by filling, flooding, excavation, or drainage, where the project area is restored to preconstruction contours and elevation, is not included in the calculation of permanent loss of waters of the U.S. This includes temporary construction mats (e.g., timber, steel, geotextile) used during construction and removed upon completion of the work. Mechanized land clearing necessary for the construction, maintenance, or repair of utility lines and the construction, maintenance and expansion of utility line substations, foundations for overhead utility lines, and access roads is authorized, provided the cleared area is kept to the minimum necessary and preconstruction contours are maintained as near as possible. The area of waters of the U.S. that is filled, excavated, or flooded must be limited to the minimum necessary to construct the utility line, substations, foundations, and access roads. Excess material shall be removed to upland areas immediately upon completion of construction. This NWP may authorize utility lines in or affecting navigable waters of the U.S. even if there is no associated discharge of dredged or fill material (See 33 CFR, Part 322).

**10.11 Section 404 Nationwide Permit No. 13.** The following bank stabilization activities will be necessary for erosion prevention provided the activity meets all of the following criteria.

**10.11.1** No material is placed in excess of the minimum needed for erosion protection.

**10.11.2** The bank stabilization activity is less than 500 feet (150 m) in length.

**10.11.3** The activity will not exceed an average of one cubic yard per running foot (2.5 m<sup>3</sup> per running meter) placed along the bank below the plane of the ordinary high water mark.

**10.11.4** No material is placed in any special aquatic site, including wetlands. Special aquatic sites include wildlife sanctuaries and refuges, wetland, mudflats, vegetated shallow and riffle and pool complexes.

**10.11.5** No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any wetland area.

**10.11.6** No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas).

**10.11.7** The activity is part of a single and complete project.

**10.11.8** This NWP shall not be used for the channelization of a water of the U.S.

**10.12 Section 404 Nationwide Permit No. 14.** Activities required for the construction, expansion, modification, or improvement of linear transportation crossings (e.g., highways, railways, trails, airport runways, and taxiways) in waters of the U.S., including wetlands, if the activity meets the following criteria.

**10.12.1** The discharge does not cause the loss of greater than 1/2-acre (0.20 ha) of waters of the US.

**10.12.2** The width of the fill shall be limited to the minimum necessary for the crossing.

**10.12.3** This permit does not authorize stream channelization, and authorized activities shall not cause more than minimal changes to the hydraulic flow characteristics of the stream, increase flooding, or cause more than minimal degradation of water quality of any stream.

**10.13 Section 404 Nationwide Permit No. 15.** Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the U.S., including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided such discharges have been authorized by the U.S. Coast Guard as part of the bridge permit. Causeways and approach fills will not be included in this NWP and will require an individual or regional Section 404 permit.

**10.14 Section 404 Nationwide Permit No. 23.** Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where that agency or department has determined, pursuant to the Council on Environmental Quality Regulation for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Part 1500 et seq.), that the activity, work, or discharge is categorically excluded from environmental documentation because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment, and the COEUSACE Office of the Chief of Engineers (ATTN: CECW-OR) has been furnished notice of the agency's or department's application for the categorical exclusion and concurs with that determination.

**10.15 Section 404 Nationwide Permit No. 33.** Temporary structures, work and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites; provided that the associated primary activity is authorized by the USACE or the U.S. Coast Guard, or for other construction activities not subject to the USACE or U.S. Coast Guard regulations. Appropriate measures shall be taken to maintain near normal downstream flows and to minimize flooding. Fill shall be of materials, and placed in a manner that will not be eroded by expected high flows. The use of dredged material may be allowed if it is determined by the USACE District Engineer that it will not cause more than minimal adverse effects on aquatic resources. Temporary fill shall be entirely removed to upland areas, or dredged material returned to the original location, following completion of the construction activity, and the affected areas shall be restored to the pre-project conditions. Cofferdams shall not

be used to dewater wetlands or other aquatic areas changing the use of these areas. Structures left in place after cofferdams are removed will require a Section 10 permit if located in navigable waters of the U. S. (See 33 CFR, Part 322).

#### **SECTION 401 WATER QUALITY CERTIFICATION CONDITIONS**

**1.0 Description.** When a Clean Water Act Section 404 Nationwide Permit is in effect, the contractor is automatically permitted to perform this work under a Water Quality Certification (Section 401) by the Missouri Department of Natural Resources (MDNR). The contractor shall adhere to the following conditions:

- 1.1** During construction, clearing of vegetation shall be kept to the minimum necessary to accomplish the project.
- 1.2** Petroleum products, equipment and solid waste shall not be stored after construction working hours below the ordinary high water mark.
- 1.3** Equipment shall not be operated, except where permitted, nor petroleum products stored in wetlands.
- 1.4** Riparian areas and stream banks shall be restored to a stable condition as soon as possible after final contouring.
- 1.5** Work done in streams shall be conducted during low flows whenever possible.
- 1.6** Petroleum products spilled into any water of the state, or in areas where material could enter waters of the state, shall be cleaned up immediately and disposed of properly.
- 1.7** The following material shall not be used for streambank stabilization: earthen fill, gravel, fragmented asphalt, broken concrete with exposed rebar, tires, vehicle bodies and liquid concrete, including grouted riprap.

#### **DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM REQUIREMENTS**

**1.0 Disadvantaged Business Enterprise (DBE) Program Requirements.** The subsequent Sections will apply only to contracts involving U.S. Department of Transportation (USDOT) federal-aid or federal financial participation. Federal-aid or federal financial participation includes, but is not limited to, any funds directly or indirectly received by MoDOT, or authorized for distribution to or through MoDOT, by the USDOT or any operating administration within the USDOT. These provisions will not apply to Commission contracts funded exclusively with state funds, or state and local funds. Any contractor, subcontractor, supplier, DBE firm, and contract surety involved in the performance of a federal-aid contract shall be aware of and fully understand the terms and conditions of the USDOT DBE Program, as the terms appear in Title 49 CFR Part 26 (as amended), the USDOT DBE Program regulations; Title 7 CSR Division 10, Chapter 8 (as amended), the Commission's DBE Program rules.

**2.0 DBE Program Distinguished From Other Affirmative Action Programs.** The USDOT DBE Program established by the U.S. Congress is not the same as, and does not involve or utilize, any of the elements or authority of other state or local affirmative action programs, nor does the program rely upon state legislation or gubernatorial executive orders for implementation or authorization, other than the general authority given the Commission in Section 226.150, RSMo. The USDOT DBE Program is implemented by the Commission and MoDOT, through and in conjunction with the FHWA, FTA and FAA, as a "recipient" defined in Title 49 CFR 26.5.

**3.0 Policy Regarding DBE Firms.** It is the policy of the U. S. Department of Transportation and MoDOT that businesses owned by socially and economically disadvantaged individuals have an opportunity to participate in the performance of contracts financed in whole or in part with federal funds. Consequently, the requirements of 49 CFR Part 26 (as amended) and the Commission's implementing state regulations in Title 7 CSR Division 10, Chapter 8, "Disadvantaged Business Enterprise Program", will apply to any contract with federal funds.

**4.0 Opportunity for DBEs to Participate.** Each contractor, subcontractor and supplier working on a contract financed in whole or in part with federal funds shall take all necessary and reasonable steps to ensure that DBEs have an opportunity to compete for, and participate in performance on project contracts and subcontracts.

**5.0 Required Contract Provision.** The federal-aid contract will include the following provision, as mandated by USDOT at Title 49 CFR 26.13(b):

(a) The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of the contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of the contract, which may result in the termination of the contract or such other remedy, as the recipient deems appropriate.

In this provision, “contractor” will be defined as the contractor on the contract; “subrecipient” will be defined as any subcontractor performing the work. For the purposes of any federal-aid contract awarded by the Commission, “the recipient” will be defined as either the Commission, or MoDOT, or both. The contractor shall include this same contract provision in every supply contract or subcontract the contractor makes or executes with a subrecipient.

**6.0 Bank Services.** The contractor, and each subrecipient on a federal-aid contract, is encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals. Such banking services, and the fees charged for services, typically will not be eligible for DBE Program contract goal credit. Any questions on this subject should be directed to the MoDOT External Civil Rights Administrator. See [Sec 7.0](#).

**7.0 DBE Program Information.** DBE Program information may be obtained from the MoDOT External Civil Rights Administrator, 105 W. Capitol Avenue, P.O. Box 270, Jefferson City, Missouri 65102-0270. Phone (573) 751-6801, Fax (573) 526-0558, E-Mail: [dbe@modot.mo.gov](mailto:dbe@modot.mo.gov). It will be the duty of each contractor, for the contractor and for the contractor’s subrecipients and surety, to take the steps necessary to determine the legal obligations and limitations under the DBE Program, as an element of responsibility. It will be the duty of each certified DBE firm to know, understand and comply with the DBE firm’s legal obligations and limitations under the DBE Program, as a requirement of program participation. A surety providing a bid or contract bond will be bound by those bonds to the duties of the surety’s principal.

**8.0 DBE Certification, and the Missouri Unified Certification Program.** At present, the only DBE firms eligible to perform work on a federal-aid contract for DBE contract goal credit are firms certified by MoDOT. When the Unified Certification Program (UCP) takes effect in Missouri pursuant to 49 CFR 26.81 and 7 CSR 10-8.061, certification of a firm as a DBE by the Missouri UCP will be equivalent to DBE certification by MoDOT.

**9.0 DBE Program-Related Certifications Made By Bidders and Contractors.** If the bidder makes a written, express disclaimer of one or more certifications or assurances in the bid, the bid will be considered non-responsive. By submitting a bid on any call involving USDOT federal financial participation, and by entering into any contract on the basis of that bid, the contractor makes each of the following DBE Program-related certifications and assurances to USDOT, to the Commission, and to MoDOT:

(a) The bidder certifies that management and bidding officers have reviewed and understand the bidding and project construction and administration obligations of the USDOT DBE Program regulations at Title 49 CFR Part 26 (as amended), the USDOT DBE Program regulations; Title 7 CSR Division 10, Chapter 8 (as amended), and the Commission’s DBE Program rules. The bidder further certifies that the contractors management personnel on the project understand and are familiar with the requirements of these federal and state DBE Program regulations; and if the bidder was not familiar with or did not understand the requirements of these regulations, they have contacted the External Civil Rights Unit of MoDOT and have been informed as to their duties and obligations under the DBE Program regulations by MoDOT staff and/or by USDOT DBE Program staff.

(b) The bidder certifies that the bidder has complied with the federal and state DBE Program requirements in submitting the bid, and will comply fully with these requirements in performing any federal-aid contract awarded on the basis of that bid.

(c) The bidder agrees to ensure that certified DBE firms have a full and fair opportunity to participate in the performance of the contract financed in whole or in part with federal funds. The bidder certifies that all necessary and reasonable steps were taken to ensure that DBE firms have an opportunity to compete for, and perform work on the contract. The bidder further certifies that the bidder not discriminate on the basis of race, color, age, national origin or sex in the performance of the contract, or in the award of any subcontract.



(d) The bidder certifies, under penalty of perjury and other applicable penal laws that if awarded the federal-aid contract, the contractor will make a good faith effort to utilize certified DBE firms to perform DBE work at or above the amount or percentage of the dollar value specified in the bidding documents. The bidder further certifies the bidder's understanding that the bidder may not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract, in whole or in any part, with another DBE, any non-DBE firm or with the contractor's own forces or those of an affiliate of the contractor, without the prior written consent of MoDOT as set out below.

(e) The bidder certifies, under penalty of perjury and other applicable penal laws that a good faith effort was made to obtain DBE participation in the contract, at or above the DBE participation contract goal. The bidder further certifies, under penalty of perjury and other applicable penal laws, that if the bidder is not able to meet the Commission's DBE contract goal, and if the bidder is not able to meet that DBE contract goal by the time the proposed DBE participation information must be submitted, within three business days after bid opening, the bidder has submitted with and as a part of the bid, a true, accurate, complete and detailed written explanation of good faith efforts to meet the DBE Contract Goal.

(f) The bidder understands and agrees that if awarded the contract the contractor is legally responsible to ensure that the contractor and each DBE subcontractor and supplier, comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each DBE firm participating in the contract fully perform the designated tasks, with the DBE's own forces and equipment, under the DBE's own direct supervision and management. The bidder certifies, under penalty of perjury and other applicable penal laws, that if it awarded the contract and if MoDOT or the Commission determine that the contractor, a DBE or any other firm retained by the contractor has failed to comply with the DBE Program requirements or federal or state DBE Program regulations, the Commission, through MoDOT, shall have the sole authority and discretion to determine the extent of the monetary value to which the DBE contract goals have not been met, and to assess against and withhold monetary damages from the contractor in the full amount of that breach. The Commission, through MoDOT, may impose any other remedies available at law or provided in the contract in the event of a contract breach. The bidder further understands and agrees that this clause authorizes the Commission, through MoDOT, to determine and fix the extent of the damages caused by a breach of any contractual or regulatory DBE Program requirement and that the damage assessment will be enforced in addition to, and not in lieu of, any other general liquidated damages clause in the contract. By submitting a bid for a federal-aid contract, and by entering into a contract, the bidder irrevocably agrees to such an assessment of liquidated damages for DBE Program purposes, and authorizes the Commission and MoDOT to make such an assessment of liquidated damages against the contractor, and to collect that assessment from any sums due the contractor under the contract, or any other contract, or by other legal process. The bidder makes this certification, agreement and authorization on behalf of itself, its subcontractors and suppliers, and the bid bond and contract bond sureties, for each federal-aid contract.

(g) The surety upon any bid or contract bond acknowledges the surety is held and firmly bound to the Commission for each and every duty of the surety's principal provided in any bid or contract regarding the DBE program.

**10.0 Designation of DBE firms to perform on contract.** The bidder states and certifies, under penalty of perjury or other applicable penal laws, that the DBE participation information submitted in the bid or within the stated time thereafter is true, correct and complete and that the information provided includes the names of all DBE firms that will participate in the contract, the specific line item (s) that each DBE firm will perform, and the creditable dollar amounts of the participation of each DBE. The specific line item must reference the MoDOT line number and item number contained in the proposal. The bidder further states and certifies that the bidder has committed to use each DBE firm listed for the work shown to meet the DBE contract goal and that each DBE firm listed has clearly confirmed that the DBE firm will participate in and perform the work, with the DBE's own forces. Award of the contract will be conditioned upon meeting these and other listed requirements of 49 CFR 26.53.

(a) The bidder certifies the bidder's understanding that as the contractor on a contract funded in whole or in part by USDOT federal funds, the bidder may not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract, in whole or in any part, with another DBE, any non-DBE firm or with the contractor's own forces or those of an affiliate, without the prior written consent of MoDOT. The bidder understands it must receive approval in writing from MoDOT for the termination of a DBE firm, or the substitution

or replacement of a DBE before any substitute or replacement firm may begin work on the project in lieu of the DBE firm participation information listed in the executed contract.

(1) The bidder further certifies understanding, that if a DBE firm listed in the bid or approved in the executed contract documents ceases to be certified at any time during the performance of the contract work, and a contract or subcontract with that firm has not yet been executed by the prime and subcontractor, the contractor can not count any work performed by that firm after the date of the firm's loss of eligibility toward meeting the DBE contract goal. However, if the contractor has executed a subcontract with the firm before the DBE lost eligibility and ceased to be a certified DBE, the contractor may continue to receive credit toward the DBE contract goal for that firm's work.

(2) The bidder further certifies understanding, that if a DBE subcontractor is terminated, or fails, refuses or is unable to complete the work on the contract for any reason, the contractor must promptly request authority to substitute or replace that firm. The request shall include written documentation that the DBE firm is unwilling or unable to perform the specified contract work. The contractor shall make good faith efforts to find another DBE subcontractor to substitute or replace the dollar amount of the work that was to have been performed by the DBE firm. The good faith efforts shall be directed at finding another DBE to perform the same, or more, dollar amount of work that the DBE firm that was terminated was to have performed under the executed contract. The substitute or replacement DBE firm may be retained to perform the same or different contract work from that which the terminated firm was to have performed. The contractor shall obtain approval from MoDOT in writing before the replacement or termination of one firm with another before the work will count toward the project DBE goal.

(3) The bidder further certifies the bidder's understanding, that the dollar value of any work completed by a DBE firm prior to approval of the DBE's substitution or replacement, in writing, by MoDOT will not be credited toward meeting the DBE contract goal. The contractor will remain subject to appropriate administrative remedies, including but not limited to, liquidated damages for the full dollar amount that the DBE contract goal is not met. Liquidated damages will also be assessed against the contractor if the original, substitute or replacement DBE firms perform the required contract work, but are not paid in full for some or all of that work by the contractor, including back charges. No credit toward the DBE goal will be given for any amount withheld from payment to the DBE or "back charged" against monies owed to the DBE, regardless of the purpose or asserted debt.

**11.0 Good Faith Effort to Secure DBE Services.** The bidder shall make a good faith effort to seek DBEs in a reasonable geographic area to where the solicitation for subcontracts and material is made. If the bidder cannot meet the goals using DBEs from that geographic area, the bidder shall, as a part of the effort to meet the goal, expand the search to a wider geographic area.

**11.1 Bidding Procedure.** The following bidding procedure shall apply to the contract, for DBE program compliance purposes.

**11.2 Contract Goal, Good Faith Efforts Specified.** The bidder may submit the completed "DBE Identification Submittal" information in the bid documents at the same time as, and within the sealed bid, at the time the bid is submitted. However, if that information is not completed and submitted with the initial sealed bid, then as a matter of responsiveness and responsibility, the apparent low and second low bidder shall file the completed "DBE Identification Submittal" pages with MoDOT on or before 4:00 p.m. of the third business day after the bid opening date, directly to the External Civil Rights Administrator, Missouri Department of Transportation, 105 W. Capitol Avenue, P.O. Box 270, Jefferson City, Missouri 65102-0270. Telefax transmittal to MoDOT will be permitted at fax no. (573) 526-0558. The complete and signed original documents shall be mailed to MoDOT no later than the day of the telefax transmission. No extension of time will be allowed for any reason. The means of transmittal and the risk of timely receipt of the information shall be the bidder's.

**11.3 Bid Rejection, Bid Security Disposition.** The failure of either the apparent low bidder or the second low bidder to file the completed and executed "DBE Identification Submittal", listing actual, committed DBE participation equal to or greater than the DBE contract goal percentage specified in the bid by 4:00 p.m. on the third business day after the bid opening, will be cause for rejection of that bid, and the bid surety bond or bid guaranty of that bidder will be forfeited to and become the property of the Commission upon Commission demand.

(a) Any bidder rejected for failure to submit the completed and executed "DBE Identification Submittal" information in the bidding documents, with full documentation of sufficient DBE participation to satisfy the DBE

contract goal cannot submit a bid on the same, or substantially similar, project, when and if the project is re-advertised for bids. By submitting a bid on a federal-aid project, the bidder accepts and agrees to this provision, and the disposition of the bidders bid bond or guaranty, on behalf of the bidder and the bidders bid surety or guaranty.

(b) The surety separately acknowledges the surety to be held and firmly bound to the Commission to immediately upon demand pay to Commission the face amount of the bid bond.

**11.4 Good Faith Efforts Described.** Good faith efforts to meet the DBE contract goal may include, but are not limited to, the following:

(a) Attending a pre-bid meeting, if any, scheduled by the department to inform DBEs of contracting and subcontracting opportunities.

(b) Advertising in general circulation trade association and socially and economically disadvantaged business directed media concerning subcontracting opportunities.

(c) Providing written notice to a reasonable number of specific DBEs so that the DBE's interest in the contract are solicited in sufficient time to allow the firm to participate effectively.

(d) Following-up on initial written notice or solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested.

(e) Maintaining documentation of responses received in the effort to solicit DBE participation.

(f) Selecting portions of work to be performed by DBEs to increase the likelihood of meeting the DBE goal, including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation.

(g) Providing interested DBEs adequate information about plans, specifications and requirements of the contract.

(h) Negotiating in good faith with interested DBEs, not rejecting DBEs as unqualified without sound business reasons based on a thorough investigation of the DBE's capabilities.

(i) Making efforts to assist interested DBEs in obtaining bonding, lines of credit or insurance required by MoDOT or by the bidder.

(j) Making effective use of available disadvantaged business organizations, minority bidders' groups, local, state and federal disadvantaged business assistance offices, MoDOT and other organizations that provide assistance in the recruitment and placement of DBEs.

**11.5 Documentation, and Administrative Reconsideration of the Bidder's Good Faith Efforts.** In the bidding documents, the bidder has the opportunity and responsibility to provide certified written documentation as to whether the bidder made a good faith effort to meet the DBE contract goal as proposed by the Commission. Any bidder that has not met the Commission's proposed DBE contract goal at the time of bid opening must submit the completed "Certification of Good Faith Efforts to Obtain DBE Participation". The certification should be included in the bidding documents, fully and in detail, at the time its sealed bid is submitted; however, if that information is not completed and submitted with the initial sealed bid, the bidder must submit the documentation to MoDOT on or before 4:00 p.m. of the third business day after the bid opening date, directly to the External Civil Rights Administrator, Missouri Department of Transportation, 105 W. Capitol Avenue, P.O. Box 270, Jefferson City, Missouri 65102-0270. Telefax transmittal to MoDOT will be permitted at fax no. (573) 526-0558. The complete and signed original documents shall be mailed to MoDOT no later than the day of the telefax transmission. No extension of time will be allowed for any reason. The means of transmittal and the risk of timely receipt of the information shall be the bidder's. The bidder shall attach additional pages to the certification, if necessary, in order to fully detail specific good faith efforts made to obtain certified DBE firm participation in the proposed contract work. If the apparent low bidder appears to have failed to adequately document in the bid that the bidder made a good faith effort to achieve sufficient DBE participation in the contract work, that firm will be offered the opportunity for administrative reconsideration upon written request, before MoDOT and the Commission reject that bid as non-responsive. However, regardless of the DBE contract goal participation level proposed by the bidder, or

the extent of good faith efforts shown, the apparent low and second low bidders shall each timely and separately file their completed and executed "DBE Identification Submittal" or face potential sanctions and the bid bond or guaranty, as specified in [Sec 10.0](#) of these provisions, may become the property of the Commission subject to Commission's demand.

**12.0 DBE Participation for Contract Goal Credit.** DBE participation on the contract will count toward meeting the DBE contract goal as follows:

(a) The applicable percentage of the total dollar value of the contract or subcontract awarded to the DBE will be counted toward meeting the DBE contract goal, only if that firm is certified by MoDOT as a DBE at the time the contract or subcontract is executed, and only for the value of the work, goods or services that are actually performed, or provided, by the DBE firm itself.

(b) When a DBE performs work as a participant in a joint venture, the contractor may count toward the DBE goal only that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the contract work that the DBE has performed with the DBE's own forces. The MoDOT External Civil Rights Administrator shall be contacted in advance regarding any joint venture involving both a DBE firm and a non-DBE firm to review and approve the contractor's organizational structure and proposed operation. When a DBE subcontracts part of the work of the contract to another firm, the value of that subcontracted work may be counted toward the DBE contract goal only if the DBE's subcontractor at a lower tier is a MoDOT certified DBE. Work that a DBE subcontracts to a non-DBE firm will not count toward the DBE contract goal. The cost of supplies and equipment a DBE subcontractor purchases or leases from the prime contractor or the prime's affiliated firms, or from another non-DBE subcontractor, will not count toward the DBE contract goal.

(c) The contractor may count expenditures to a DBE subrecipient toward the DBE contract goal only if the DBE performs a commercially useful function (CUF) on that contract.

(d) A contractor may not count the participation of a DBE subcontractor toward the contractor's final compliance with the contractor's DBE contract goal obligations until the amount being counted has actually been paid to the DBE. A contractor may count 60 percent of the contractor's expenditures actually paid for material and supplies obtained from a DBE certified by MoDOT as a regular dealer, and 100 percent of such expenditures actually paid for materials and supplies obtained from a certified DBE manufacturer.

(1) A regular dealer will be defined as a firm that owns, operates, or maintains a store, warehouse or other establishment in which the material, supplies, articles or equipment required and used under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the DBE firm shall be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions will not be considered regular dealers.

(2) A DBE firm may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone or asphalt, without owning, operating or maintaining a place of business where it keeps such items in stock, if the DBE both owns and operates distribution equipment for the products it sells and provides for the contract work. Any supplementation of a regular dealer's own distribution equipment shall be by a long-term lease agreement, and not on an *ad hoc* or contract-by-contract basis.

(3) If a DBE regular dealer is used for DBE contract goal credit, no additional credit will be given for hauling or delivery to the project site goods or materials sold by that DBE regular dealer. Those delivery costs shall be deemed included in the price charged for the goods or materials by the regular dealer, who shall be responsible for their distribution.

(4) A manufacturer will be defined as a firm that operates or maintains a factory or establishment that produces on the premises, the material, supplies, articles or equipment required under the contract and of the general character described by the project specifications. A manufacturer will include firms that produce finished goods or products from raw or unfinished material, or that purchases and substantially alters goods and materials to make them suitable for construction use before reselling them.

(e) A contractor may count toward the DBE contract goal the following expenditures to certified DBE firms that are not "regular dealers" or "manufacturers" for DBE program purposes:

(1) The contractor may count toward the DBE contract goal the entire amount of fees or commissions charged by a certified DBE firm for providing a bona fide service, such as professional, technical, consultant or managerial services, or for providing bonds or insurance specifically required for the performance of the federal-aid contract, if the fee is reasonable and not excessive, compared with fees customarily charged for similar services.

(2) The contractor may count toward the DBE contract goal the entire amount of that portion of the construction contract that is performed by the DBE's own forces and equipment, under the DBE's supervision. This includes the cost of supplies and material ordered and paid for by the DBE for contract work, including supplies purchased or equipment leased by the DBE except supplies and equipment a DBE subcontractor purchases or leases from the prime contractor or its affiliates.

(f) A contractor may count toward the DBE contract goal 100 percent of the fees paid to a certified DBE trucker or hauler for delivery of material and supplies required on a job site, but not for the cost of those materials or supplies themselves, or for the removal or relocation of excess material from or at the job site, when the DBE certified trucking company is not also the manufacturer of or a regular dealer in those material and supplies, provided that the trucking or hauling fee is determined by MoDOT to be reasonable as compared with fees customarily charged by non-DBE firms for similar services. The certified DBE trucking firm shall also perform a CUF on the project and not operate merely as a pass through for the purposes of gaining credit toward the contract DBE goal. Prior to submitting a bid, the contractor shall determine, or contact the MoDOT External Civil Rights Administrator for assistance in determining, whether a DBE trucking firm will meet the criteria for performing a CUF on the project.

(g) The contractor will receive DBE contract goal credit for the fees or commissions charged by and paid to a DBE broker who arranges or expedites sales, leases or other project work or service arrangements, provided that those fees are determined by MoDOT to be reasonable and not excessive, as compared with fees customarily charged by non-DBE firms for similar services. A broker will be defined as a person or firm that does not own or operate the delivery equipment necessary to transport materials, supplies or equipment to or from a job site; a broker typically will not purchase or pay for the material, supplies or equipment, and if the broker does purchase or pay for those items, those costs will be reimbursed in full. In most instances, the broker is merely the entity making arrangements for delivery of material, supplies, equipment, or arranging project services. To receive DBE contract goal credit, MoDOT must determine that the DBE broker has performed a CUF in providing the contract work or service.

**13.0 Performing a Commercially Useful Function (CUF).** No credit toward the DBE contract goal will be allowed for contract payments or expenditures to a DBE firm, if that DBE firm does not perform a CUF on that contract. A DBE performs a CUF when the DBE is solely responsible for execution of a distinct element of the contract work, and the DBE actually performs, manages and supervises the work involved with the firm's own forces. To perform a CUF, the DBE alone shall be responsible, and alone must bear the risk, for the material and supplies used on the contract, selecting a supplier or dealer from those available, negotiating price, determining quality and quantity, ordering the material and supplies, installing those materials with the DBE's own forces and equipment and paying for those materials and supplies. The amount the DBE firm is to be paid under the contract shall be commensurate with the work the DBE actually performs and the DBE credit claimed for the DBE's performance.

**13.1 Contractor's Obligation to Monitor CUF Performance.** It shall be solely the contractor's responsibility to ensure that all DBE firms perform a CUF. Further, the contractor is responsible to, and shall ensure that each DBE firm fully performs the DBE's designated tasks, with the DBE's own forces and equipment, under the DBE's own direct supervision and management. MoDOT is under no obligation to warn the contractor that a DBE's participation may not count toward the goal, other than through official notification with an opportunity for administrative reconsideration at the conclusion of the contract work.

**13.2 DBEs Must Perform a Useful and Necessary Role in Contract Completion.** A DBE does not perform a commercially useful function if the DBE's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

**13.3 DBEs Must Perform The Contract Work With Their Own Workforces.** If a DBE does not perform and exercise responsibility for at least 30 percent of the total cost of the DBE's contract with the DBE's own work force,

or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, MoDOT will presume that the DBE is not performing a commercially useful function.

**13.4 Factors Used to Determine if a DBE Trucking Firm is Performing a CUF.** The following factors will be used to determine whether a DBE trucking company is performing a commercially useful function (CUF):

(a) To perform a CUF, the DBE trucking firm shall be completely responsible for the management and supervision of the entire trucking operation that the DBE is being paid for on the contract work. There shall not be contrived arrangement, including but not limited to, any arrangement that would not customarily exist under regular construction project subcontracting practices for the purpose of meeting the DBE contract goal.

(b) The DBE must own and operate at least one fully licensed, insured and operational truck used in performance of the contract work. This does not include a supervisor's pickup truck or a similar vehicle that is not suitable for hauling the necessary materials or supplies.

(c) The DBE receives 100 percent contract goal credit for the total reasonable amount the DBE is paid for the transportation services provided on the contract using trucks the DBE owns, insures and operates, using drivers that the DBE employs.

(d) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE firm that leases trucks from another DBE will receive credit for the total fair market value actually paid for of the transportation services the lessee DBE firm provides on the contract.

(e) The DBE may also lease trucks from a non-DBE firm, including an owner-operator. However, the DBE who leases trucks from a non-DBE is entitled to DBE contract goal credit only for the brokerage fee or commission the DBE receives as a result of the lease arrangement. The DBE will not receive credit for the total value of the transportation services provided by the non-DBE lessee. Furthermore, no DBE contract goal credit will be allowed, even for brokerage fees or commissions, where the DBE leases the trucks from the contractor on the project or a firm owned, controlled by, or affiliated by ownership or control to, the contractor.

(f) For purposes of this section, the lease shall indicate that the DBE firm leasing the truck has exclusive use of and control over the truck. This will not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, provided the lease gives the DBE absolute priority for and control over the use of the leased truck. Leased trucks shall display the name and identification number of the DBE firm that has leased the truck at all times during the life of that lease.

**13.5 MoDOT Makes Final Determination On Whether a CUF Is Performed.** MoDOT and the Commission will have the final authority to determine whether a DBE firm has performed a CUF on a federal-aid contract. To determine whether a DBE is performing or has performed a CUF, MoDOT will evaluate the amount of work subcontracted by that DBE firm or performed by other firms, and the other firms forces and equipment. Any DBE work performed by the contractor, or by employees or equipment of the contractor will be subject to disallowance under the DBE Program, unless the independent validity and need is demonstrated.

#### **14.0 Verification of DBE Participation, Liquidated Damages.**

**14.1** Prior to final payment by the Commission, the contractor shall file with the Commission a detailed list showing each DBE used on the contract work, and the work performed by each DBE. The list shall show the actual dollar amount paid to each DBE for the creditable work on the contract, less any rebates, kickbacks, deductions, withholdings or other repayments made. The list shall be certified under penalty of perjury, or other law, to be accurate and complete. MoDOT and the Commission will use this certification and other information available to determine if the contractor and the contractor's DBEs satisfied the DBE contract goal percentage specified in the contract and the extent to which the DBEs were fully paid for that work. The contractor shall acknowledge, by the act of filing the detailed list, that the information is supplied to obtain payment regarding a federal participation contract.

**14.2** Failure on the part of the contractor to achieve the DBE participation to which the contractor committed in the contract may result in liquidated damages being imposed on the contractor by the Commission for breach of contract and for non-compliance. If the contract was awarded with less than the original DBE contract goal proposed by the

Commission, the revised lower amount shall become the final DBE contract goal, and that goal will be used to determine any liquidated damages to be assessed. Additionally, the Commission or MoDOT may impose any other administrative sanctions or remedies available at law or provided by the contract in the event of breach by the contractor by failing to satisfy the contractor's DBE contract goal commitment. However, no liquidated damages will be assessed, and no other administrative sanctions or remedies will be imposed when, for reasons beyond the control of the contractor and despite the good faith efforts made by the contractor, the final DBE contract goal participation percentage was not achieved. The contractor will be offered the opportunity for administrative reconsideration of any assessment of liquidated damages, upon written request. The administrative reconsideration officer may consider all facts presented, including the legitimacy or business reason for back charges assessed against a DBE firm, in determining the final amount of liquidated damages.

**15.0 Prompt Payment Requirements.** In accordance with Title 49 CFR 26.29, the contractor shall comply with the prompt payment requirements of that regulation, Section 34.057, RSMo., the provisions of the Commission's rule 7 CSR 10-8.111 and the contract. By bidding on a federal-aid contract, and by accepting and executing that contract, the contractor agrees to assume these contractual obligations, and to bind the contractor's subrecipients contractually to those prompt payment requirements at the contractor's expense.

**16.0 Miscellaneous DBE Program Requirements.** In accordance with Title 49 CFR Part 26 and the Commission's DBE Program rules in Title 7 CSR Division 10, Chapter 8, the contractor, for both the contractor and for the contractor's subcontractors and suppliers, whether DBE firms or not, shall commit to comply fully with the auditing, record keeping, confidentiality, cooperation and anti-intimidation or retaliation provisions contained in those federal and state DBE Program regulations. By bidding on a federal-aid contract, and by accepting and executing that contract, the contractor agrees to assume these contractual obligations, and to bind the contractor's subrecipients contractually, at the contractor's expense.

## **TRAINING PROVISION**

**1.0 Description.** This provision supplements subparagraph 7(e) of the Contract Provision entitled "Standard Federal Equal Opportunity Construction Contract Specification" (Executive Order 11246)", and implements 23 USC 140(a).

**2.0 Training Requirements.** As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows.

**2.1** The contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

**2.2** The number of trainee hours to be provided under this provision will be specified in the bidding documents.

**2.3** When a contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, hours the subcontractor shall instruct the trainees. The contractor shall retain the primary responsibility for both meeting the training requirements imposed by this provision, and of informing each subcontractor about this provision.

**2.4** The number of trainee hours shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Before construction, the contractor shall submit to the engineer for approval the number of trainee hours required in each selected classification and the training program to be used, or a list of the trainees participating in the Contractor Approved Training (CAT) program. The contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for the hours worked by each trainee employed on the contract work who is currently enrolled or becomes enrolled in an approved program and the contractor will be reimbursed for such trainees as provided hereinafter.

**2.5** Training and upgrading of minorities and women toward journeyman status is a primary objective of this provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor shall demonstrate the steps taken in pursuance thereof, prior to a determination as to whether the contractor is in

compliance with this provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training.

**2.6** No employee shall be employed as a trainee in any classification in which the employee has successfully completed a training course leading to journeyman status or in which the employee has been employed as a journeyman. The contractor shall satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records shall document the findings in each case.

**2.7** The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the engineer and FHWA. Approved programs will be reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a state apprenticeship agency recognized by the Bureau of apprenticeship and training programs approved, but not necessarily sponsored by, the Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, will also be considered acceptable provided the training is being administered consistent with the equal employment obligations of Federal-aid highway construction contracts.

**2.8** Approval or acceptance of a training program shall be obtained from the engineer prior to beginning work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerical or secretarial-type positions. Training will be permissible in lower level management positions, such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted, provided significant and meaningful training is provided and approved by the engineer. Some offsite training will be permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

**2.9** Except as otherwise noted below, the contractor will be reimbursed \$3.50 per hour of training per contract employee in the contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number of trainee hours specified in the contract. Reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other sources do not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor when the trainees are concurrently employed on a federal-aid project and the contractor does one or more of the following, and contributes to the cost of the training, provides instruction to the trainee, or pays the trainee's wages during the offsite training period.

**2.10** No payment will be made to the contractor if either failure to provide the required training or failure to hire the trainee as a journeyman is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this provision. A trainee should begin training on the project as soon as feasible after start of work, utilizing the skill involved and should remain on the project as long as training opportunities exist in the trainee's work classification or until the trainee has completed the training program. It is not required that all trainees for the entire length of the contract. The contractor will have fulfilled the responsibilities under this provision if the contractor has provided acceptable training for the number of trainee hours specified.

**2.11** Trainees shall be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the U.S. Department of Labor or Transportation in connection with the existing program will apply to all trainees being trained for the same classification who are covered by this provision.

**2.12** The contractor shall furnish to the trainee a copy of the training program. The contractor shall provide each trainee and the resident engineer with a certification showing the type and length of training satisfactorily completed.

**2.13** The contractor shall maintain records and furnish monthly reports documenting the contractor's performance under this provision. Monthly reports shall include at least the following information:



Contractor's name and address  
 Period that the report covers  
 Job Number, Description, and Federal Aid number  
 Information for each employee being trained on the project, including:

- Name
- Social Security Number
- Trade/craft
- Pay percent, based on portion of training complete (if applicable)
- Journeyman's full prevailing wage applicable
- Trainee wage
- Hours this period
- Cumulative hours for the project

Total trainee hours for the project for this period  
 Cumulative trainee hours for the project

## **STRENGTH OF CONCRETE USING THE MATURITY METHOD**

**1.0 Description.** This specification covers the maturity method as a non-destructive means of determining in-place concrete strength for pavement or structural applications. The concept of the maturity method is based on the combined effects of concrete age and temperature, during hydration, on the rate of strength gain for a specific concrete mix. This method requires the establishment of a relationship between compressive strength and calculated maturity indices for a specific concrete mixture prior to placement of the mixture in the field. The contractor may use the maturity method in accordance with this specification to estimate the compressive strength of the in-place concrete.

**2.0 Procedure.** In-place concrete strength determined by the maturity method shall be in accordance with ASTM C 1074, except as noted herein.

**2.1 Maturity Meter.** The maturity meter shall have a secure means of collecting data that is unalterable.

**2.2 Maturity Function Values.** In lieu of determining values for datum temperature,  $T_o$ , or activation energy divided by the gas constant,  $Q$ , values of 14 F (-10 C) or 5000 Kelvin may be used, respectively.

**2.3 Standardization.** The calibration of systems used for monitoring the maturity of concrete shall be verified every seven working days in accordance with AASHTO TP 52, Section 9.1 and ASTM C 1074, Section 7.1.

**2.4 Development of the Strength-Maturity Relationship.** The contractor shall develop the strength-maturity relationship prior to placing any concrete on the project, and shall notify the engineer prior to development of the maturity curve. The development of the strength-maturity relationship shall be done in the field using project equipment and materials.

**2.4.1** When the strength-maturity relationship is developed, compressive strength specimens shall be fabricated, cured and tested at the plant site and fabricated from a minimum 3 cubic yard (2.3 m<sup>3</sup>) batch of concrete. Temperature of the fresh concrete shall be measured and recorded. All field specimens shall be fabricated and cured in accordance with AASHTO T 23, with the following exceptions. Specimens shall be cured for the first 24 hours under similar or like temperature conditions anticipated during construction, and specimens, including the cylinder used to monitor temperature, shall be demolded at approximately 24 hours and cured in accordance with AASHTO T 23, Section 9.1.3. The concrete mixture shall meet the specification requirements in order to determine the strength-maturity relationship. The concrete mixture shall be at or above the target air content established by the contractor.

**2.4.2** The contractor shall provide the engineer with the following information prior to placing any concrete on the project:

- (a) The project number, route, county, concrete job mix number and date of testing.
- (b) The air, slump and water content from the batch of concrete tested.

- (c) The amount and type of admixture(s) used in the concrete mix.
- (d) The strength of each test specimen, and the average strength of test specimens at each test age.
- (e) Maturity index for each instrumented test specimen, and the average maturity index for the instrumented specimens at each test age.
- (f) A graph of the average compressive strength versus the average value of the maturity index, as described in the strength-maturity relationship section of ASTM C 1074.

**2.5 Compressive Strength Testing.** At a minimum, compressive strength tests shall be performed on three specimens, and the average strength computed at 1, 3, 7, 14 and 28 days. Production may start after the seven-day compressive strengths have been determined with approval from the engineer.

**2.6 Placement of Temperature Sensors.** For pavement and pavement repairs, temperature sensors shall be embedded at approximately mid-depth and 18 inches (450 mm) from the edge of pavement. For other applications, temperature sensors shall be embedded in locations considered critical in terms of exposure conditions and structural requirements. Temperature sensors shall be placed at the following frequency:

Structure Component	Frequency
Pavement	1 sensor per 3600 sq. yd. (3000 m <sup>2</sup> ), with a minimum of one in the last 50 feet (15 m) of pavement.
Pavement Repairs	1 sensor per 10 patches, with a minimum of one sensor in the last patch.
Structural	A minimum of one sensor at the end of the pour, with three other sensors available to be placed as directed by the engineer.

**3.0 Proportioning, Mixing, Placing and Curing Field Placed Concrete.** The maturity method does not account for variations in strength due to proportioning, mixing, placing and curing of concrete. Proper methods shall be followed at all times during proportioning, mixing, placing and curing the field placed concrete.

**3.1 Field Placed Concrete Mix Requirements.** Mix constituents of the field placed concrete shall not change, and mix proportions of the field placed concrete shall not vary more than five percent from the concrete mix used to develop the strength-maturity relationship. The water cement ratio shall not vary by more than 0.02. Temperature of the fresh concrete during production shall be at or above the temperature of the fresh concrete used to develop the strength-maturity relationship.

**3.2 Requiring Immediate Validation of Strength-Maturity Relationship.** If the mix constituents change more than five percent, the water cement ratio changes more than 0.02, the material sources change or the mixing operation changes, an immediate validation of the strength-maturity curve shall be done in accordance with Section 4.0.

**4.0 Validation of Strength-Maturity Relationship.** At a minimum, every seventh day of concrete placement a validation test shall be conducted to verify that in-place concrete strength is accurately represented by the strength-maturity relationship. The engineer shall be notified at least one business day in advance of when and where the validation test will be done.

**4.1** The validation test shall be as follows.

**4.1.1** The contractor shall document the air, slump, and water content from the batch of concrete tested and any deviations from the original job mix.

**4.1.2** During placement of the field placed concrete, a minimum of four compressive strength cylinders shall be fabricated and cured as specified in Section 2.4.1 of this provision.

**4.1.3** A temperature sensor shall be embedded to within 1/2 inch (13 mm) of the center of one cylinder for computing the maturity index from the measured temperature history as specified in Section 2.0 of this provision.

**4.1.4** Once the maturity index, according to the temperature monitored cylinder, is achieved which corresponds to the maturity index desired for the first critical action such as opening pavement to traffic or removing formwork, three cylinders shall be tested for compressive strength.

**4.1.5** The average compressive strength of the three cylinders shall be compared to the compressive strength as determined by the strength-maturity relationship. If the predicted strength is within 10 percent or 200 psi, whichever is less, of the actual compressive strength, then the strength-maturity relationship will be considered validated.

**4.2** If the actual compressive strength is more than 10 percent or 200 psi (1380 kPa) above the compressive strength as determined by the strength-maturity relationship, then a new strength-maturity relationship may be developed.

**4.3** If the actual compressive strength is more than 10 percent or 200 psi (1380 kPa), whichever is less, below the compressive strength as determined by the strength-maturity relationship, the contractor shall make cylinders to determine compressive strengths until a new strength-maturity relationship has been developed.

**5.0 Field Documentation.** The contractor shall provide the engineer with the following information prior to taking any field action based on the strength-maturity strengths:

- (a) Project number, route, county, and date tested.
- (b) A list of each concrete lot evaluated.
- (c) Station numbers.
- (d) Quantity of concrete.
- (e) Maturity index determined for each sensor location.
- (f) Estimated strength determined for each sensor location.

**5.1** The contractor shall record all test results for equipment calibration and verification, and shall maintain all results in an organized format. Test results shall be available to the engineer at all times.

**6.0 Basis of Payment.** No additional payment will be made for compliance with this special provision.

### **"DRIVE SMART" SIGNS**

**1.0 Description.** This work shall consist of installing "Drive Smart" signs. The 48 x 48-inch (1200 x 1200 mm) signs will be furnished by the Commission. The contractor shall furnish labor, equipment, posts and hardware for installation of the signs in accordance with this provision and the plans, or as directed by the engineer.

**2.0 Material.** All material shall be in accordance with Division 1000, Material Details.

**3.0 Construction Requirements.** The signs shall be post-mounted and placed approximately 500 feet (150 m) before the "ROAD WORK AHEAD" sign or the "ROAD WORK NEXT XX MILES" sign, for each direction of travel affected by the project. A project on only one pavement of a dual divided facility will require only one sign. The contractor shall maintain all signs until completion of the project. Upon completion of the project, the contractor shall disassemble the signs and retain the posts and hardware. The signs shall remain the property of the Commission and shall be delivered without damage to locations as directed by the engineer.

**4.0 Basis of Payment.** The accepted quantity of signs will be paid for at the contract unit price per each.

**"POINT OF PRESENCE" SIGNS**

**1.0 Description.** This work shall consist of installing a 96 X 48 inch (2400 X 1200 mm) "Point of Presence" sign. The Commission will furnish the sign. The contractor shall furnish labor, equipment, posts and hardware for installation of the sign in accordance with this provision or as directed by the engineer.

**2.0 Construction Requirements.** The "Point of Presence" sign shall be post mounted on three 3-pound/foot (4.5 kg/m) U-channel posts with 32-inch (815 mm) spacing between posts. The sign shall be placed as shown on the plans. A project impacting only one direction of a divided highway will require only one sign. The contractor shall maintain all signs until completion of the project. Upon completion of the project, the "Point of Presence" signs shall remain in place. The sign, posts and hardware will remain the property of the Commission.

**3.0 Basis of Payment.** The accepted quantity of "Point of Presence" signs will be paid for at the contract unit price per each.

**ALTERNATE TEMPORARY EROSION CONTROL MEASURES**

**1.0 Description.** This provision provides for alternate temporary erosion control measures to those specified in Sec 806 or as shown on the plans. All work shall be in accordance with Sec 806, except as herein specified.

**2.0 Material and Design.** The major items of the installation shall be the best standard products of the manufacturer and shall be of the manufacturer's latest approved design. The contractor shall furnish a manufacturer's certification that the units furnished are identical in material and design to those approved.

Alternative temporary erosion control measures shall be pre-approved prior to use. The following products have been pre-approved:

<i>Ditch</i>				<i>Drainage</i>
<u>Check Type</u>	<u>Product</u>	<u>Manufacturer</u>	<u>Slope</u>	<u>Area</u>
I	Dura Check Sediment Control Panel	Panel Products, Inc. 3216 S. Saratoga Springfield, MO 65804 Telephone (417) 886-9838	0-10%	3 acres (1.2 ha)
II	Triangular Silt Dike	Triangular Silt Dike Co., Inc. 608 Greenwood Midwest City, OK 73110 Telephone (800) 290-8473	0-10%	50 acres (20 ha)
II	Enviro Berm Porous Sediment Control System	Cascade Distribution, Inc. 15620-121A Avenue Edmonton, Alberta Canada T5V 1B5 Telephone (800) 565-6130	0-10%	50 acres (20 ha)

**3.0 Installation.** Alternate temporary erosion control methods shall be installed in accordance with the manufacturer's recommendations at the locations shown on the plans.

**4.0 Maintenance.** Alternate temporary erosion control methods shall be maintained as required by the manufacturer and as directed by the engineer.

**REVISIONS TO 2004 MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION****SECTION 105 – CONTROL OF WORK**

*Amend Sec 105 to include the following:*

**105.18 Arbitration.**

**105.18.1. Purpose.** By adoption of 226.096 RSMo (L. 2003, HB 668), certain controversies or claims to which the Missouri Department of Transportation is a party that arises out of or relates to a contract awarded pursuant to subdivision (9) of subsection 1 of 226.130 (RSMo) subject to certain limits and preconditions are subject to, "be settled (sic) by arbitration administered by the American Arbitration Association under its Construction Industry Arbitration Rules, except as provided," in 226.096. Under the provisions of Chap. 435 RSMo arbitration is the subject of agreement between the parties to a contract. This section provides for incorporation of the, American Arbitration Association's, *Construction Industry Arbitration Rules and Mediation Procedures (AAA Rules)*, amended and effective on the date for arbitration is demanded and for their modification and revisions as permitted by the AAA Rules and Chap. 435 RSMo.

**105.18.2. Incorporation.** The AAA Rules are incorporated as part of the contract except as amended or excluded. The AAA Rules are further expressly amended or excluded as provided herein and as provided directly or indirectly by 226.096 RSMo (L. 2003, HB 668) and Chap. 435 RSMo.

**105.18.3 Regular Track Procedures.** The AAA Construction Industry Arbitration Rules, Regular Track Procedures, July 1, 2003 are amended as follows:

**105.18.3.1 R-1. Agreement of Parties.** Not revised.

**105.18.3.2 R-2. AAA and Delegation of Duties.** Not revised.

**105.18.3.3 R-3. National Roster of Neutrals** – Shall be replaced with the following:

In cooperation with the National Construction Dispute Resolution Committee the AAA shall establish and maintain a National Roster of Construction Arbitrators ("National Roster") and shall appoint arbitrators as provided first by the provisions of Missouri law, including 7 CSR 10-26, and then as provided in these rules. The term "arbitrator" in these rules refers to the arbitration panel, constituted for a particular case, whether composed of one or more arbitrators, or to an individual arbitrator, as the context requires.

**105.18.3.4 R-4. Initiation under an Arbitration Provision in a Contract.** Not revised.

**105.18.3.5 R-5. Initiation under a Submission.** Not revised.

**105.18.3.6 R-6. Changes to Statement of Controversy or Claim** - Shall be replaced with the following:

The contract between the parties provides for a Notice of Controversy or a Claim for adjustment to the contract prior to any demand for arbitration. Arbitration demands, issues, nature or amount of relief sought, shall not differ or be additional to that in the Notice of Controversy or Claim for contract adjustment provided for in the contract. There may not be a revision of the issues, nature of relief sought or increase in relief during or by way of any presentation of evidence during the arbitration. No award may be upon different issues or basis of relief or provide relief different in nature or greater in amount than contained in the Notice of Controversy or Claim given under the contract and stated in the demand for arbitration. No new or different controversy, claim or counterclaim may be submitted to the arbitrator except with the consent of both parties and the arbitrator and any consent must be clearly expressed, written and signed by the parties. There will be no amendments by implication.

**105.18.3.7 R-7. Consolidation or Joinder** - Shall be replaced with the following:

If Commission expressly agrees in writing with regard to multiple disputes arising under a particular contract, multiple demands may be consolidated so long as the relief sought in total does not exceed \$328,011 in the principal

relief sought, as adjusted on an annual basis effective January first of each year in accordance with the Implicit Price Deflator for Personal Consumption Expenditures as calculated pursuant to subsection 5 of section 537.610, RSMo. Demands to which Commission is not a party in direct privity of contract will never be joined. The issue of consolidation of claims and joinder of parties will not be arbitrable. Nothing in this section shall prohibit more than one demand for arbitration pursuant to the same contract, provided that each demand for arbitration arises from a separate claim based upon facts supporting a separate right of relief, filed with the Department and accepted by the department under the Missouri Department of Transportation's "Contractor Claims and Controversies Procedures". Neither shall a prime contractor be prohibited from filing a demand for arbitration arising from work, which was subcontracted provided that; (a) the claim was initially accepted by the department under "Contractor Claims and Controversies Procedures." and (b) would provide a right to contract adjustment separate from any claimed or which could be claimed by the prime contractor for its sole benefit. However, subcontractors shall have no right to file a demand for arbitration with the Commission.

**105.18.3.8 R-8. Jurisdiction.** Not revised.

**105.18.3.9 R-9. Mediation.** Not revised.

**105.18.3.10 R-10. Administrative Conference.** Not revised.

**105.18.3.11 R-11. Fixing of Locale.** Not revised.

**105.18.3.12 R-12. Appointment of Arbitrators** – Delete paragraphs (a), (b), and (c) and replace with the following:

Arbitrators will be selected and appointed in accordance with 7 CSR 10-26.

**105.18.3.13 R-13. Direct Appointment by a Party.** Not revised.

**105.18.3.14 R-14. Appointment by a Chairperson by Party-Appointed Arbitrators or Parties.** Not revised.

**105.18.3.15 R-15. Nationality of Arbitrator in International Arbitration.** Not revised.

**105.18.3.16 R-16. Number of Arbitrators.** Not revised.

**105.18.3.17 R-17. Disclosure.** Not revised.

**105.18.3.18 R-18. Disqualification of Arbitrator.** Not revised.

**105.18.3.19 R-19. Communication with Arbitrator.** Not revised.

**105.18.3.20 R-20. Vacancies.** Not revised.

**105.18.3.21 R-21. Preliminary Hearing.** Not revised.

**105.18.3.22 R-22. Exchange of Information.** Not revised.

**105.18.3.23 R-23. Date, Time, and Place of Hearing.** Not revised.

**105.18.3.24 R-24. Attendance at Hearings.** Not revised.

**105.18.3.25 R-25. Representation.** Not revised.

**105.18.3.26 R-26. Oaths.** Not revised.

**105.18.3.27 R-27. Stenographic Record.** Not revised.

**105.18.3.28 R-28. Interpreters.** Not revised.

**105.18.3.29 R-29. Postponements.** Not revised.

**105.18.3.30 R-30. Arbitration in the Absence of a Party or Representative.** Not revised.

**105.18.3.31 R-31. Conduct of Proceedings.** Not revised.

**105.18.3.32 R-32. Evidence.** Not revised.

**105.18.3.33 R-33. Evidence by Affidavit and Posthearing Filing of Documents or Other Evidence.** Not revised.

**105.18.3.34 R-34. Inspection or Investigation.** Not revised.

**105.18.3.35 R-35. Interim Measures.** Not revised.

**105.18.3.36 R-36. Closing of Hearing.** Not revised.

**105.18.3.37 R-37. Reopening of Hearing.** Not revised.

**105.18.3.38 R-38. Waiver of Rules.** Not revised.

**105.18.3.39 R-39. Extensions of Time.** Not revised.

**105.18.3.40 R-40. Serving of Notice** – Paragraphs (a) and (b) shall be replaced with the following:

(a) Any papers, notices, or process necessary or proper for the initiation or continuation of an arbitration under these rules; for any court action in connection therewith, or for the entry of judgment on any award made under these rules, may be served on a party by mail addressed to the party or its representative at the last known address with return receipt or by personal service, in or outside the state where the arbitration is to be held, provided that reasonable opportunity to be heard with regard thereto has been granted to the party.

(b) The AAA, the arbitrator and the parties may also use overnight delivery with return receipt or electronic facsimile transmission (fax) to give the notices required by these rules. Facsimile transmission must require an acknowledgment that an entire legible transmission was received. Where all parties and the arbitrator agree, notices may be transmitted by electronic mail (email), or other methods of communication.

(c) Not revised

**105.18.3.41 R-41. Majority Decision.** Not revised.

**105.18.3.42 R-42. Time of Award.** Not revised.

**105.18.3.43 R-43. Form of Award** – Paragraph (b) shall be replaced with the following:

(a) Not revised.

(b) The arbitrator shall provide a concise, written breakdown of the basis of the award and a written explanation and justification for the awarded amount.

**105.18.3.44 R-44. Scope of Award.** Not revised.

**105.18.3.45 R-45. Award upon Settlement.** Not revised.

**R105.18.3.46 R-46. Delivery of Award to Parties.** Not revised.

**105.18.3.47 R-47. Modification of Award.** Not revised.

**105.18.3.48 R-48. Release of Documents for Judicial Proceedings.** Not revised.

**105.18.3.49 R-49. Applications to Court and Exclusion of Liability** – Paragraph (c) shall be replaced with the following:

(a) Not revised.

(b) Not revised.

(c) Parties to these rules shall be deemed to have consented that judgment upon the arbitration award shall be entered as provided by 226.096, RSMo (L. 2003, HB 668).

(d) Not revised.

**105.18.3.50 R-50. Administrative Fees.** Not revised.

**105.18.3.51 R-51. Expenses.** Not revised.

**105.18.3.52 R-52. Neutral Arbitrator's Compensation.** Not revised.

**105.18.3.53 R-53. Deposits.** Not revised.

**105.18.3.54 R-54. Interpretation and Application of Rules.** Not revised.

**105.18.3.55 R-55. Suspension for Nonpayment.** Not revised.

**105.18.4 Fast Track Procedures.** The AAA Construction Industry Arbitration Rules, Fast Track Procedures, July 1, 2003 are amended as follows:

**105.18.4.1 F-1. Limitation on Extensions.** Not revised.

**105.18.4.2 F-2. Changes of Claim or Counterclaim** - Shall be replaced with the following:

The contract between the parties provides for a Notice of Controversy or a Claim for adjustment to the contract prior to any demand for arbitration. Arbitration demands, issues, nature or amount of relief sought, shall not differ or be additional to that in the Notice of Controversy or Claim for contract adjustment provided for in the contract. There may not be a revision of the issues, nature of relief sought or increase in relief during or by way of any presentation of evidence during the arbitration. No award may be upon different issues or basis of relief or provide relief different in nature or greater in amount than contained in the Notice of Controversy or Claim given under the contract and stated in the demand for arbitration. No new or different controversy, claim or counterclaim may be submitted to the arbitrator except with the consent of both parties and the arbitrator and any consent must be clearly expressed, written and signed by the parties. There will be no amendments by implication.

**105.18.4.3 F-3. Serving of Notice** – Paragraphs (a) and (b) shall be replaced with the following:

(a) Any papers, notices, or process necessary or proper for the initiation or continuation of an arbitration under these rules; for any court action in connection therewith, or for the entry of judgment on any award made under these rules, may be served on a party by mail addressed to the party or its representative at the last known address with return receipt or by personal service, in or outside the state where the arbitration is to be held, provided that reasonable opportunity to be heard with regard thereto has been granted to the party.

(b) The AAA, the arbitrator and the parties may also use overnight delivery with return receipt or electronic facsimile transmission (fax) to give the notices required by these rules. Facsimile transmission must require an acknowledgment that an entire legible transmission was received. Where all parties and the arbitrator agree, notices may be transmitted by electronic mail (email), or other methods of communication.

**105.18.4.4 F-4. Appointment and Qualification of Arbitrator** - Shall be replaced with the following:

The provisions of 7 CSR 10-26 and the procedures for regular track arbitrator selection, apply to fast track procedure arbitrations.

**105.18.4.5 F-5. Preliminary Telephone Conference.** Not revised.



**105.18.4.6 F-6. Exchange of Exhibits.** Not revised.

**105.18.4.7 F-7. Discovery.** Not revised.

**105.18.4.8 F-8. Proceedings on Documents.** Not revised.

**105.18.4.9 F-9. Date, Time, and Place of Hearing.** Not revised.

**105.18.4.10 F-10. The Hearing.** Not revised.

**105.18.4.11 F-11. Time of Award.** Not revised.

**105.18.4.12 F-12. Time Standards.** Not revised.

**105.18.4.13 F-13. Arbitrator's Compensation.** Not revised.

**105.18.5 Form of Award** – Shall be added as follows:

The arbitrator shall provide a concise, written breakdown of the basis of the award and a written explanation and justification for the awarded amount.